



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-1016; Directorate Identifier 2010-SW-009-AD]

RIN 2120-AA64

Airworthiness Directives; Bell Helicopter Textron, Inc.

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for Bell Helicopter Textron, Inc. (Bell), Model 412 and 412EP helicopters. This proposed AD is prompted by reports of cracking in the swashplate outer ring assemblies (outer ring). This AD would establish a lower life limit on certain outer rings, requiring a revision of the retirement life on the components' history card or equivalent record, and a revision of the maintenance manual or Instructions for Continued Airworthiness (ICA). This proposal also would prohibit installing these outer rings on any helicopter. The proposed actions are intended to prevent failure of an outer ring because of cracking, which could lead to the loss of main rotor (M/R) blade pitch control and subsequent loss of helicopter control.

DATES: We must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- **Federal eRulemaking Docket:** Go to <http://www.regulations.gov>. Follow the online instructions for sending your comments electronically.

- Fax: 202-493-2251.
- Mail: Send comments to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590-0001.
- Hand Delivery: Deliver to the “Mail” address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

EXAMINING THE AD DOCKET: You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this proposed AD, contact Bell Helicopter Textron, Inc., P.O. Box 482, Fort Worth, TX 76101; telephone (817) 280-3391; fax (817) 280-6466; or at <http://www.bellcustomer.com/files/>. You may review a copy of the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

FOR FURTHER INFORMATION CONTACT: Michael Kohner, Aviation Safety Engineer, Rotorcraft Certification Office, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, TX 76137; telephone (817) 222-5447; email 7-avs-asw-170@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit only one time.

We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. Before acting on this proposal, we will consider all comments we receive on or before the closing date for comments. We will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. We may change this proposal in light of the comments we receive.

Discussion

This proposal is prompted by a report of fatigue cracking in the outer ring, part number (P/N) 412-010-407-105. The outer ring previously had a life limit of 10,000 hours TIS, but Bell has recommended reducing the outer ring retirement life to 2,500 hours TIS. Cracking in the outer ring can lead to loss of cyclic and collective pitch control of the main rotor blades and loss of helicopter control.

FAA's Determination

We are proposing this AD because we evaluated all known relevant information and determined that an unsafe condition exists and is likely to exist or develop on other products of these same type designs.

Related Service Information

We have reviewed Bell Helicopter Alert Service Bulletin No. 412-08-131, Revision B, dated October 29, 2009 (ASB), which describes procedures for establishing a new retirement life for the outer ring and replacing the outer ring at 2,500 hours TIS.

Proposed AD Requirements

This proposed AD would require the following:

- Within 30 days, establish a new retirement life of 2,500 hours TIS for outer ring P/N 412-010-407-105, and record this on the component history card or equivalent record. Within the same time period, make pen-and-ink changes or insert a copy of the AD into the Airworthiness Limitations section of the applicable maintenance manual or ICA.

- Within 300 hours TIS, for any affected outer ring that has 2,200 or more hours TIS on the effective date of the proposed AD, replace the outer ring with an airworthy outer ring.

- Within 12 months, for any affected outer ring, regardless of the number of hours TIS, replace the outer ring with an airworthy outer ring. The installation of outer ring, P/N 412-010-407-105, would be prohibited on any helicopter.

Differences between this Proposed AD and the Service Information

The ASB sets a calendar date for compliance. This proposed AD does not.

Costs of Compliance

We estimate that this proposed AD would affect 143 helicopters. We estimate that it would take about one work-hour to revise the component history card or equivalent record, as well as the maintenance manual or ICA, at an average labor rate of \$85 per work hour, for a total cost of \$85 per helicopter and \$12,155 for the U.S. operator fleet. Replacing an outer ring would take 26 work-hours and required parts would cost an estimated \$25,725. Based on these figures, we calculate the total cost to be \$27,935 per helicopter to replace an outer ring.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify this proposed regulation:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by Reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

BELL HELICOPTER TEXTRON, INC. (BELL): Docket No. FAA-2012-1016;
Directorate Identifier 2010-SW-009-AD.

(a) Applicability.

This AD applies to Bell Model 412 and 412EP helicopters, with a swashplate outer ring assembly (outer ring), part number (P/N) 412-010-407-105, certificated in any category.

(b) Unsafe Condition.

This AD defines the unsafe condition as cracking in the outer ring, which could result in the loss of main rotor (M/R) blade pitch control and subsequent loss of helicopter control.

(c) Compliance.

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(d) Required Actions.

(1) Within 30 days, establish a retirement life of 2,500 hours time-in-service (TIS) for any affected outer ring on the component history card or equivalent record. Revise the helicopter Airworthiness Limitations section of the applicable maintenance manual or Instructions for Continued Airworthiness (ICA) by establishing the new

retirement life by making pen and ink changes or inserting a copy of this AD into the maintenance manual or the ICAs.

(2) For any affected outer ring that, on the effective date of this AD, has 2,200 or more hours TIS, within 300 hours TIS, replace the outer ring with an airworthy outer ring.

(3) Within 12 months, for any affected outer ring, regardless of the number of hours TIS, replace the outer ring with an airworthy outer ring.

(4) Do not install outer ring, P/N 412-010-407-105, on any helicopter.

(e) Special flight permit.

No special flight permits will be issued for any helicopter installed with outer ring, P/N 412-010-407-105, if the outer ring has 2,500 hours or more TIS.

(f) Alternative Methods of Compliance (AMOC).

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Michael Kohner, Aviation Safety Engineer, Rotorcraft Certification Office, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, TX 76137; telephone (817) 222-5447; email 7-avs-asw-170@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office before operating any aircraft complying with this AD through an AMOC.

(g) Additional Information.

(1) Removal and installation instructions, as well as M/R assembly track and balance procedures, are contained in Bell manuals BHT-412-MM and BHT-412-CR&O. Bell Helicopter Alert Service Bulletin No. 412-08-131, Revision B, dated October 29, 2009, contains additional information about the subject of this AD. None of these documents is incorporated by reference.

(2) For service information identified in this AD, contact Bell Helicopter Textron, Inc., P.O. Box 482, Fort Worth, TX 76101; telephone (817) 280-3391; fax (817) 280-6466; or at <http://www.bellcustomer.com/files/>. You may review a copy of information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

(h) Subject.

Joint Aircraft Service Component (JASC) Code: 6230, Main Rotor Mast/Swashplate.

Issued in Fort Worth, Texas, on September 14, 2012.

Lance T. Gant,

Acting Manager, Rotorcraft Directorate,
Aircraft Certification Service.

[FR Doc. 2012-23457 Filed 09/21/2012 at 8:45 am; Publication Date: 09/24/2012]